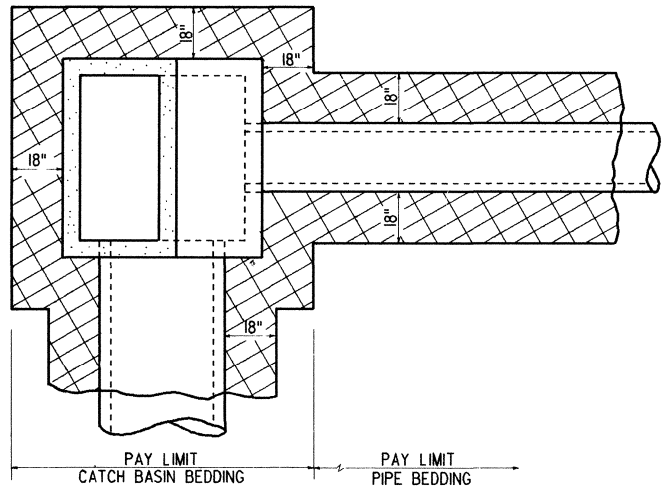
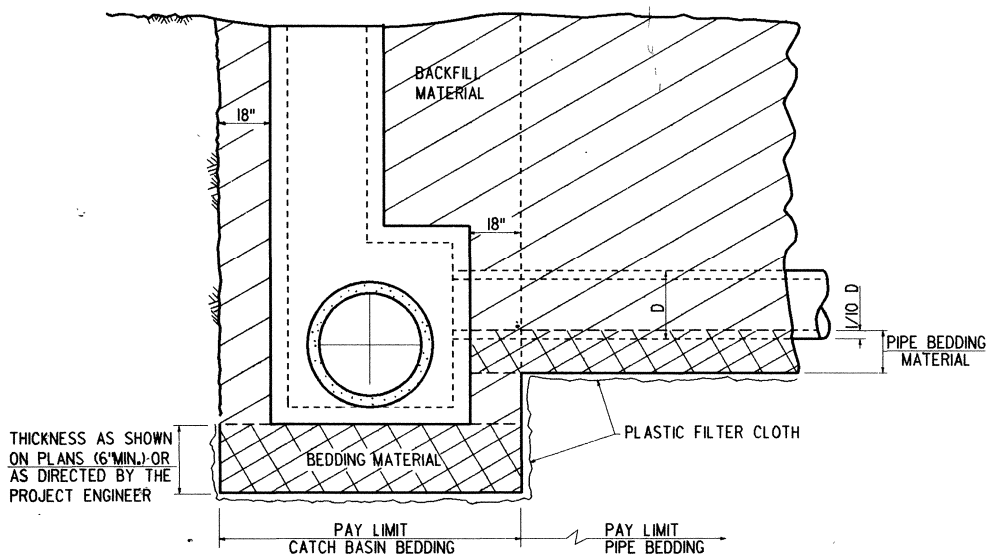
TYPICAL CATCH BASIN AND STORM SEWER PIPE INSTALLATION WITH BEDDING MATERIAL



PLAN OF TYPICAL CATCH BASIN (MANHOLE OR JUNCTION BOX) & PIPE



PROFILE OF TYPICAL CATCH BASIN, (MANHOLE OR JUNCTION BOX) AND PIPE

*DEDUCTION FROM BACKFILL QUANTITY

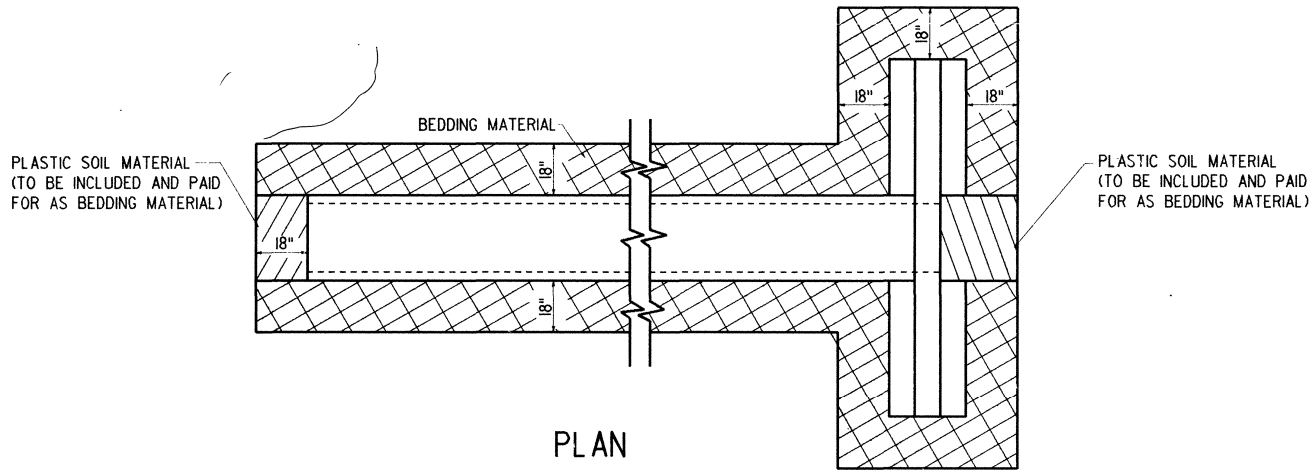
R.C.PIPE		C.M.PIPE
PIPE DIAMETER	CU.YDS./LIN.FT.	CU.YDS./LIN.FT.
15"	0.0768	0.0455
18"	0.1068	0.0654
24"	0.1818	0.1164
30"	0.2765	0.1818
36"	0.3910	0.2618
42"	0.5254	0.3563
48"	0.6795	0.4654
54"	0.8534	0.5890
60"	1.0471	0.7272
72"	1.4940	1.0472
84"	2.0200	1.4253
96"	2.6252	1.8617
108"	3.3096	2.3562
120"	3.9593	2.9089
132"	4.7908	3.5197
144"	5.7014	4.1888

*DEDUCTION FROM BACKFILL QUANTITY

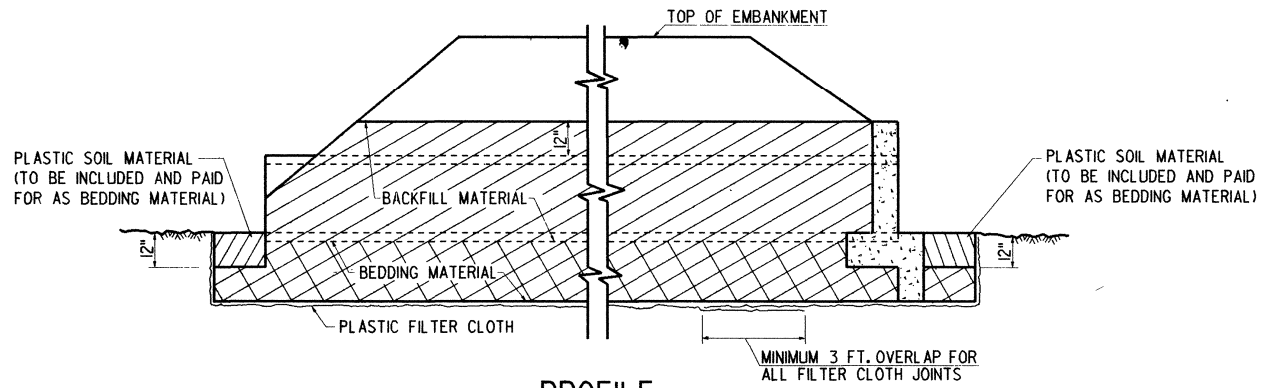
R.C.PIPE ARCH		C.M.PIPE ARCH	
EQUIV.DIAM.	CU.YDS./LIN.FT.	EQUIV.DIAM.	CU.YDS./LIN.FT.
18"	0.0979	18"	0.0593
24"	0.1615	24"	0.1037
30"	0.2495	30"	0.1630
36"	0.3488	36"	0.2370
42"	0.4742	42"	0.3222
48"	0.6171	48"	0.4222
54"	0.7654	54"	0.5296
60"	0.9526	60"	0.6519
72"	1.3599	72"	0.9630
84"	1.8302	84"	1.2963
96"	2.6655	96"	1.7037
108"	3.3170	108"	2.1481

*FOR INFORMATIONAL PURPOSES ONLY. THE COST OF THE BACKFILL IS TO BE INCLUDED IN THE COST OF THE HYDRAULIC STRUCTURE.

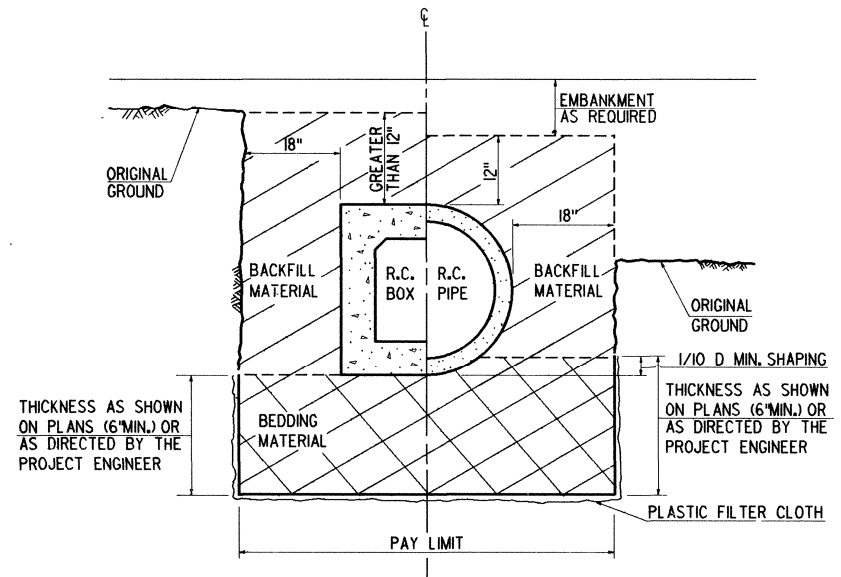
TYPICAL CROSS DRAIN INSTALLATION WITH BEDDING MATERIAL



PLAN



PROFILE



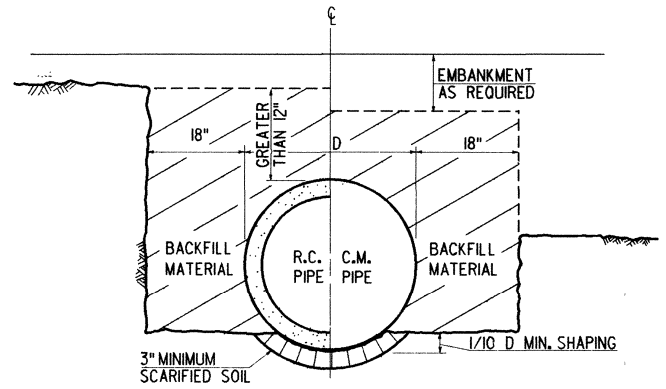
SECTION THRU TRENCH

HALF-SECTION SHOWING TOP OF BOX GREATER THAN 12" BELOW ORIGINAL GROUND (TRENCH INSTALLATION)

HALF-SECTION SHOWING TOP OF PIPE ABOVE ORIGINAL GROUND (EMBANKMENT INSTALLATION)

	STATE PROJECT	PARISH	SHEET NO.

TYPICAL PIPE INSTALLATION WITHOUT BEDDING MATERIAL



SECTION THRU TRENCH

HALF-SECTION SHOWING TOP OF PIPE GREATER THAN 12" BELOW ORIGINAL GROUND (TRENCH INSTALLATION)

HALF-SECTION SHOWING TOP OF PIPE ABOVE ORIGINAL GROUND (EMBANKMENT INSTALLATION)

GENERAL NOTES:

1. STANDARD D.O.T.D. PIPE INSTALLATION, BEDDING, AND BACKFILL ARE DEFINED IN SECTIONS 701 AND 726 OF THE "LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES".
2. THE NEED AND/OR THE THICKNESS OF BEDDING MATERIAL WILL BE DETERMINED BY THE GEO-TECHNICAL SECTION AND WILL BE SHOWN ON THE PLANS. ADDITIONAL BEDDING MATERIAL MAY BE REQUIRED BY THE PROJECT ENGINEER AT NO COST TO THE CONTRACTOR.
3. THE DETAILS ON THIS SHEET DEPICT PAY LIMITS FOR BEDDING MATERIALS. THE BEDDING MATERIAL PAY QUANTITIES ARE TO BE BASED ON THE THEORETICAL NET SECTION WITH NO PIPE DEDUCTIONS. FULL PIPE DEDUCTIONS (SEE TABLES ON THIS SHEET) FOR BACKFILL QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE COST OF THE BACKFILL IS TO BE INCLUDED IN THE COST OF THE HYDRAULIC STRUCTURE.
4. REINFORCED CONCRETE PIPE, REINFORCED CONCRETE BOX AND CORRUGATED METAL PIPE ARE SHOWN AS TYPICAL STRUCTURES, DETAILS FOR REINFORCED CONCRETE PIPE ARCH, CORRUGATED METAL PIPE ARCH, AND CORRUGATED STRUCTURAL PLATE STRUCTURES ARE SIMILAR.
5. PLASTIC FILTER CLOTH SHALL BE REQUIRED WHEN BEDDING MATERIAL IS REQUIRED AND SHALL BE PLACED IN ACCORDANCE WITH DETAILS PRIOR TO PLACING BEDDING MATERIAL. ADJACENT STRIPS OF FILTER CLOTH SHALL LAP EACH OTHER FOR AT LEAST 3 FEET. PLASTIC FILTER CLOTH WILL NOT BE MEASURED FOR PAYMENT.
6. BEDDING SHOWN ON THIS STANDARD PLAN CONFORMS TO CLASS "B" AS DEFINED BY THE 1983 AASHTO SPECIFICATIONS.

STANDARD PLAN NO. BM-01 | ~~SHEET~~ 1 OF 1

STANDARD PLAN BEDDING AND BACKFILL FOR DRAINAGE STRUCTURES

DATED JUNE 8, 1971

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DESIGNED	DETAILED P.A.A.	TRACED K.A.J.
CHECKED	CHECKED J.C.M.	CHECKED C.D.J.

APPROVED BY CHIEF ENGINEER Original Signed by Chief Engineer

DATE	DESCRIPTION	BY
2-19-86	REVISED	H.J.B
3-2-79	RETRACED	W.

REVISIONS